

**REMARKS**

In the Advisory Action dated February 14, 2003, the Examiner states that claims 12-20 raise an issue under 35 U.S.C. §112, second paragraph, because of lack of antecedent basis for the language "silver halide color photographic emulsion". Claims 12-20 are amended to state "silver halide color photographic material".

**I. The Rejections Under 35 U.S.C. §103(a)**

Claims 1-11 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over the combination of Miyamoto et al (Miyamoto) and Hioki et al (Hioki).

Claims 1-6 and 9-11 are rejected under 35 U.S.C. §103 as allegedly being unpatentable over Hioki.

In the Advisory Action, the Examiner states that the Declaration under 37 C.F.R. §1.132 filed May 29, 2002 is "irrelevant to the silver halide color photothermographic material exemplified in Miyamoto et al, especially the material in Example 2, columns 36-39."

The Examiner notes that the material disclosed in the Declaration is made according to Sample No. 201 of the present specification wherein different combination of dyes has been compared. However, the Examiner states that "the invention is related to a silver halide color photographic material [which] encompasses the scope taught in Miyamoto wherein the good results are obtained

by the use of the selenium compound and the spectral sensitizing dye" and that "the photographic properties of the silver halide photographic material are not based solely on the spectrally sensitize alone, but with other addenda such as silver halide grain, chemical sensitizer, antifoggant etc."

The Examiner concludes that "in the absence of using the material of the prior art as a base to compare the combination of the dyes claimed in the present invention, it is the Examiner's position that the claimed invention is still prima facie obvious over the applied prior art of record."

Applicants respectfully submit that Comparative Sample 214 of EXAMPLE 2 in the previous Declaration is representative of the cited art and is a proper comparative sample. Applicants submit that Comparative Sample 214 of EXAMPLE 2 is an equivalent example to the inventional sample of EXAMPLE 2 in Miyamoto et al.

The Examiner states that, as a matter of course, the photographic properties are not based solely on spectrally sensitizing dyes, but may also be affected by other addenda such as particles and chemical sensitizers. However, it is difficult to carry out comparative experiments under exactly the same conditions. Accordingly, in order to compare exactly the affect of an particular component relating to an invention (the spectral sensitizing dyes in the present invention), rather than an "absolute comparison of the photographic property" a "relative comparison of the

photographic property" with a comparative sample different only in the component is carried out, as well as use of a constitution as close as possible.

The constitution of the color photosensitive materials of EXAMPLE 2 in the Declaration accords with EXAMPLE 2 of the present specification and the layer constitution of these photosensitive materials are equivalent to the layer constitution of Miyamoto et al. Although the structures and amounts of the compounds used are slightly different, the differences are due to the progress of the technique and exert no influence on the relative comparison of the photographic property intended to be compared in the experiment. The Examiner mentions chemical sensitizers, but the respective emulsions of EXAMPLE 2 of the present invention underwent chemical sensitization with gold, sulfur, and selenium compound 1" as described on page 74 of the present specification, and which is identical with selenium sensitizer 41 of Miyamoto et al (column 18). Of the inventional samples in TABLE 5 of Miyamoto et al, this selenium sensitizer is used in Sample 221.

Sample 221 of Miyamoto et al and the Sample 214 of EXAMPLE 2 of the Declaration are compared. Miyamoto et al uses three kinds of sensitizing dyes of I-1, S-2, and S-7. Of these sensitizing dyes, I-1 corresponds to V-2 in the Declaration and S-7 of Miyamoto et al is equivalent to S-2 of the Declaration (a sulfopropyl group and a sulfobutyl group substituting change places from right and

left to left and right, and these dyes are different only in that respect). Therefore these dyes are thought to have no influence on the result of the comparative experiment. S-2 of Miyamoto et al, which is a dye having no dissociative group, is a dye irrelevant to the constitution of the present invention. Applicant believe that it is preferable not to add S-2 of Miyamoto et al, based on the comparative experiment between a sample containing two dyes with dissociative groups for use in the present invention and a sample containing two dyes with dissociative groups which is not within the scope of the present invention.

In view of the above, Applicants believe that Sample 214 of EXAMPLE 2 of the Declaration is a proper comparative sample of the technique disclosed by Miyamoto et al.

In EXAMPLE 2 of the Declaration, it is apparent from a comparison of the aforesaid comparative Sample 214 with Sample 203 of the present invention that Sample 203 of the present invention is excellent and much improved in sensitivity (relatively sensitivity based on that of Sample 201) and cyan residual color. These are effects that are unexpected in view of the disclosures of Miyamoto.

Applicants' position concerning the disclosures of Hoiki remain as stated in the Amendment filed January 31, 2003, which is herein incorporated by reference. Further, Applicants have established the unexpected superiority of the presently claimed invention over the materials disclosed in Miyamoto and Hioki.

For the above reasons, it is respectfully submitted that the subject matter of claims 11-20 is neither taught by nor made obvious from the disclosures of Hioki et al alone or Miyamoto and Hioki and it is requested that the rejections under 35 U.S.C. §103(a) be reconsidered and withdrawn.

## II. Conclusion

In view of the above, Applicants respectfully submit that the claim language is clear and definite and that their claimed invention is allowable and ask that rejections under 35 U.S.C. §103 be reconsidered and withdrawn. Applicants respectfully submit that this case is in condition for allowance and allowance is respectfully solicited.

If any points remain at issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the local exchange number listed below.

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case.

Amendment  
U.S. Appln. No. 09/845,355

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

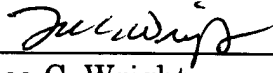
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Date: May 13, 2003

**APPENDIX**

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

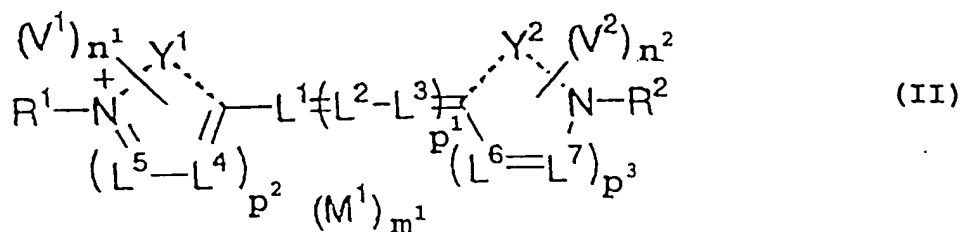
**IN THE CLAIMS:**

**The claims are amended as follows:**

12 (Amended). The silver halide color photographic [emulsion] material as claimed in claim 11, wherein the dissociable group other than  $-\text{SO}_3\text{H}$  is selected from the group consisting of  $-\text{COOH}$ ,  $-\text{CONHSO}_2\text{R}$ ,  $-\text{SO}_2\text{NHCOR}$ ,  $-\text{SO}_2\text{NHSO}_2\text{R}$ ,  $-\text{CONHCOR}$ ,  $-\text{OSO}_3\text{H}$ ,  $-\text{PO}(\text{OH})_2$ ,  $-\text{OPO}(\text{OH})_2$ ,  $-\text{B}(\text{OH})_2$ ,  $-\text{OB}(\text{OH})_2$ ,  $-\text{ArOH}$ , and  $-\text{ArSH}$ , wherein R represents an alkyl group, an aryl group, a heterocyclic group, an alkoxy group, an aryloxy group, a heterocyclic oxy group, or an amino group, and Ar represents an arylene group.

13 (Amended). The silver halide color photographic [emulsion] material as claimed in claim 11, wherein said sensitizing dyes are cyanine dyes.

14 (Amended). The silver halide color photographic [emulsion] material as claimed in claim 11, wherein said sensitizing dyes are represented by the following formula (II):

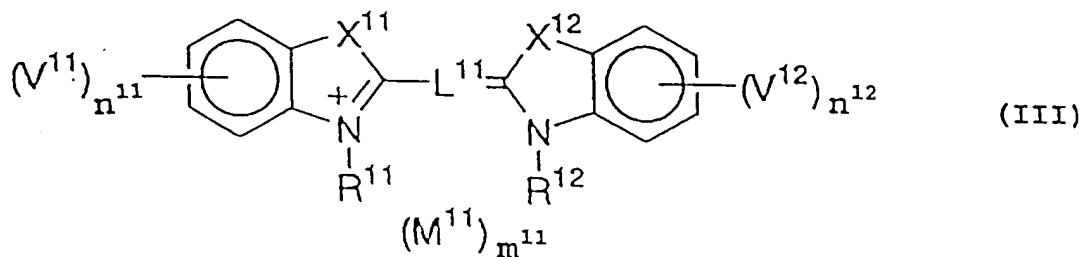


wherein R<sup>1</sup> and R<sup>2</sup> each represents a substituted alkyl, aryl or heterocyclic group, and R<sup>1</sup> is substituted with -SO<sub>3</sub>H and R<sup>2</sup> is substituted with a dissociable group other than -SO<sub>3</sub>H; Y<sup>1</sup> and Y<sup>2</sup> each represents an atomic group necessary to form a 5- or 6-membered nitrogen-containing heterocyclic ring, and Y<sup>1</sup> and Y<sup>2</sup> may be condensed with other carbocyclic ring or heterocyclic ring; V<sup>1</sup> and V<sup>2</sup> each represents a substituent; n<sup>1</sup> and n<sup>2</sup> each represents an integer of 0 or more, and when n<sup>1</sup> and n<sup>2</sup> each represents 2 or more, V<sup>1</sup> and V<sup>2</sup> may be the same as or different from each other; L<sup>1</sup>, L<sup>2</sup>, L<sup>3</sup>, L<sup>4</sup>, L<sup>5</sup>, L<sup>6</sup> and L<sup>7</sup> each represents a methine group; p<sup>1</sup> represents 0, 1, 2 or 3, p<sup>2</sup> and p<sup>3</sup> each represents 0 or 1, and when p<sup>1</sup> represents 2 or 3, repeating L<sup>2</sup> and L<sup>3</sup> may be the same as or different from each



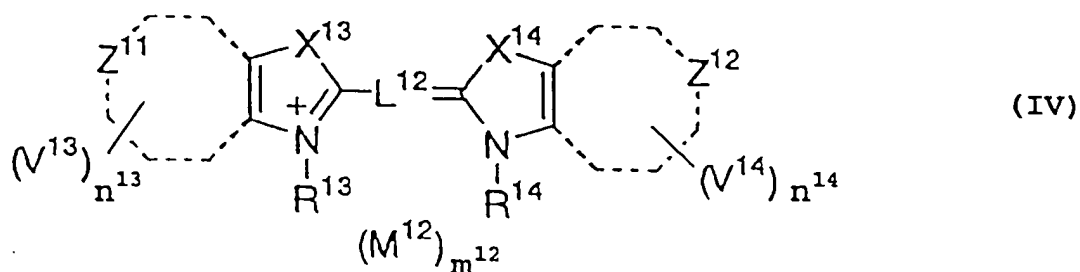
other;  $M^1$  represents a counter ion; and  $m^1$  represents a number of 0 or more necessary to neutralize the electric charge in the molecule.

15 (Amended). The silver halide color photographic [emulsion] material as claimed in claim 11, wherein at least one sensitizing dye is represented by the following formula (III) and at least one sensitizing dye is represented by formula (IV):



wherein  $R^{11}$  and  $R^{12}$  each represents a substituted alkyl, aryl or heterocyclic group, and  $R^{11}$  is substituted with  $-SO_3H$  and  $R^{12}$  is substituted with a dissociable group other than  $-SO_3H$ ;  $X^{11}$  and  $X^{12}$  each represents an oxygen atom, a sulfur atom, a selenium atom,  $NR^{15}$ ,  $CR^{16}R^{17}$ , or  $L^{13}=L^{14}$ ;  $R^{15}$ ,  $R^{16}$  and  $R^{17}$  each represents a substituted or unsubstituted alkyl, aryl or heterocyclic group;  $L^{13}$  and  $L^{14}$  each represents a methine group;  $V^{11}$  and  $V^{12}$  each represents a substituent;  $n^{11}$  and  $n^{12}$  each represents an integer of 0 or more, and when  $n^{11}$  and  $n^{12}$  each represents 2 or more,  $V^{11}$  and  $V^{12}$  may be the same as or different from each other;

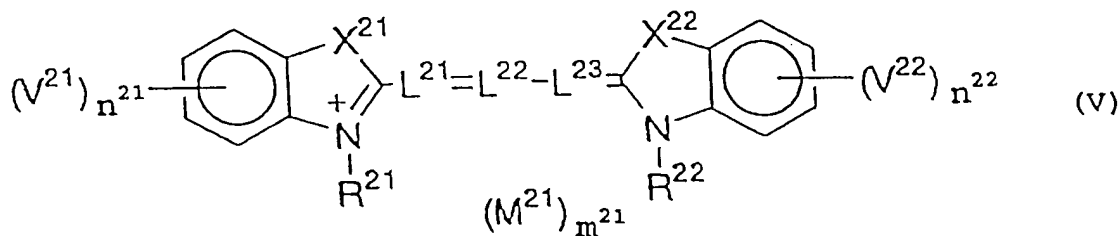
$L^{11}$  represents a methine group;  $M^{11}$  represents a counter ion; and  $m^{11}$  represents a number of 0 or more necessary to neutralize the electric charge in the molecule;



wherein  $R^{13}$  and  $R^{14}$  each represents a substituted alkyl, aryl or heterocyclic group, and at least one of  $R^{13}$  and  $R^{14}$  is substituted with  $-SO_3H$  and the other is substituted with a dissociable group other than  $-SO_3H$ ;  $X^{13}$  and  $X^{14}$  each represents an oxygen atom, a sulfur atom, a selenium atom,  $NR^{18}$ ,  $CR^{19}R^{20}$ , or  $L^{15}=L^{16}$ ;  $R^{18}$ ,  $R^{19}$  and  $R^{20}$  each represents a substituted or unsubstituted alkyl, aryl or heterocyclic group;  $L^{15}$  and  $L^{16}$  each represents a methine group;  $Z^{11}$  represents a benzene ring or a naphthalene ring;  $Z^{12}$  represents a naphthalene ring;  $V^{13}$  and  $V^{14}$  each represents a substituent;  $n^{13}$  and  $n^{14}$  each represents an integer of 0 or more, and when  $n^{13}$  and  $n^{14}$  each represents 2 or more,  $V^{13}$  and  $V^{14}$  may be the same as or different from each other;  $L^{12}$  represents a methine group;  $M^{12}$  represents a counter ion; and  $m^{12}$  represents a number of 0 or more necessary to neutralize the electric charge in the molecule.

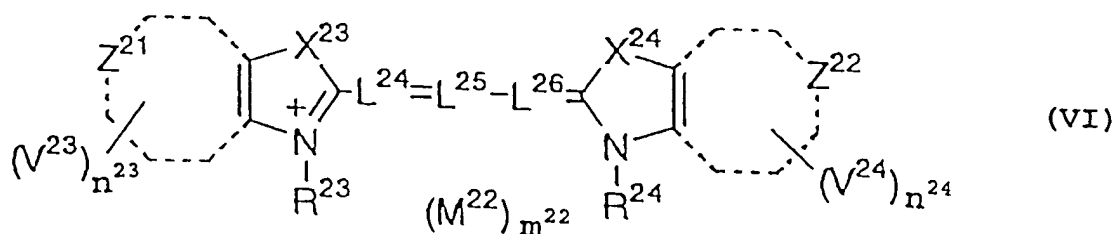
16 (Amended). The silver halide color photographic [emulsion] material as claimed in claim 15, wherein the dissociable group other than  $-\text{SO}_3\text{H}$  is selected from the group consisting of  $-\text{COOH}$ ,  $-\text{CONHSO}_2\text{R}$ ,  $-\text{SO}_2\text{NHCOR}$ ,  $-\text{SO}_2\text{NHSO}_2\text{R}$ , and  $-\text{CONHCOR}$ , wherein R represents an alkyl group, an aryl group, a heterocyclic group, an alkoxyl group, an aryloxy group, a heterocyclic oxy group, or an amino group.

17 (Amended). The silver halide color photographic [emulsion] material as claimed in claim 11, wherein at least one sensitizing dye is represented by the following formula (V) and at least one sensitizing dye is represented by formula (VI):



wherein  $\text{R}^{21}$  and  $\text{R}^{22}$  each represents a substituted alkyl, aryl or heterocyclic group, and at least one of  $\text{R}^{21}$  and  $\text{R}^{22}$  is substituted with  $-\text{SO}_3\text{H}$  and the other is substituted with a dissociable group other than  $-\text{SO}_3\text{H}$ ;  $\text{X}^{21}$  and  $\text{X}^{22}$  each represents an oxygen atom, a sulfur atom, a selenium atom,  $\text{NR}^{25}$ ,  $\text{CR}^{26}\text{R}^{27}$ , or

$L^{27}=L^{28}$ ;  $R^{25}$ ,  $R^{26}$  and  $R^{27}$  each represents a substituted or unsubstituted alkyl, aryl or heterocyclic group;  $L^{27}$  and  $L^{28}$  each represents a methine group;  $V^{21}$  and  $V^{22}$  each represents a substituent;  $n^{21}$  and  $n^{22}$  each represents an integer of 0 or more, and when  $n^{21}$  and  $n^{22}$  each represents 2 or more,  $V^{21}$  and  $V^{22}$  may be the same as or different from each other;  $L^{21}$ ,  $L^{22}$  and  $L^{23}$  each represents a methine group;  $M^{21}$  represents a counter ion; and  $m^{21}$  represents a number of 0 or more necessary to neutralize the electric charge in the molecule;



wherein  $R^{23}$  and  $R^{24}$  each represents a substituted alkyl, aryl or heterocyclic group, and at least one of  $R^{23}$  and  $R^{24}$  is substituted with  $-SO_3H$  and the other is substituted with a dissociable group other than  $-SO_3H$ ;  $X^{23}$  and  $X^{24}$  each represents an oxygen atom, a sulfur atom, a selenium atom,  $NR^{28}$ ,  $CR^{29}R^{30}$ , or  $L^{29}=L^{30}$ ;  $R^{28}$ ,  $R^{29}$  and  $R^{30}$  each represents a substituted or unsubstituted alkyl, aryl or heterocyclic group;  $L^{29}$  and  $L^{30}$  each represents a methine group;  $Z^{21}$

represents a benzene ring or a naphthalene ring;  $Z^{22}$  represents a naphthalene ring;  $V^{23}$  and  $V^{24}$  each represents a substituent;  $n^{23}$  and  $n^{24}$  each represents an integer of 0 or more, and when  $n^{23}$  and  $n^{24}$  each represents 2 or more,  $V^{23}$  and  $V^{24}$  may be the same as or different from each other;  $L^{24}$ ,  $L^{25}$  and  $L^{26}$  each represents a methine group;  $M^{22}$  represents a counter ion; and  $m^{22}$  represents a number of 0 or more necessary to neutralize the electric charge in the molecule.

18 (Amended). The silver halide color photographic [emulsion] material as claimed in claim 17, wherein the dissociable group other than  $-SO_3H$  is selected from the group consisting of  $-COOH$ ,  $-CONHSO_2R$ ,  $-SO_2NHCOR$ ,  $-SO_2NHSO_2R$ , and  $-CONHCOR$ , wherein R represents an alkyl group, an aryl group, a heterocyclic group, an alkoxyl group, an aryloxy group, a heterocyclic oxy group, or an amino group.

19 (new). The silver halide color photographic [emulsion] material as claimed in claim 11, wherein 50% or more of the entire projected area of the silver halide grains in said emulsion is accounted for by tabular grains having an aspect ratio of 2 or more.

20 (new). The silver halide color photographic [emulsion] material as claimed in claims 11, wherein said emulsion is chemically sensitized with a selenium sensitizer.